



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,989	01/16/2007	Benoist Sebire	915-001.082	7127
4955 7590 07/07/2010 WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468				
EXAMINER				
WOO, KUO-KONG				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
07/07/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/574,989

Applicant(s)

SEBIRE ET AL.

Examiner

KUO WOO

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13 and 16-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13 and 16-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is response to the communication filed on January 10, 2010.
2. Claims 1-2, 4-13, 16-23 are pending in this action. Claims 1, 10, 16, 18 and 19 have been amended. Claims 3, 14, 15 have been cancelled.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. The Claims 22 and 23 are rejected under U.S.C. 101 non-statutory subject matter for eligibility of computer readable media.

The United States Patent and Trademark Office (USPTO) is obliged to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. See *In re Zletz*, 893F.2d 319 (Fed. Cir. 1989) (during patent examination the pending claims must be interpreted as broadly as their terms reasonably allow). The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals per se in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. See MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal per se, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See *In re Nuijten*, 500 F.3d 1346,1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject

matter) and Interim Examination Instructions for Evaluating Subject Matter Eligibility under 35 U.S.C. § 101, Aug. 24, 2009; p. 2.

The USPTO recognizes that applicants may have claims directed to computer readable media that cover signals per se, which the USPTO must reject under 35 U.S.C. § 101 as covering both non-statutory subject matter and statutory subject matter. In an effort to assist the patent community in overcoming a rejection or potential rejection under 35 U.S.C. § 101 in this situation, the USPTO suggests the following approach. A claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding

the limitation "non-transitory" to the claim. Cf. *Animals - Patentability*, 1077 Off. Gaz. Pat. Office 24 (April 21, 1987) (suggesting that applicants add the limitation "non-human" to a claim covering a multi-cellular organism to avoid a rejection under 35 U.S.C. § 101). Such an amendment would typically not raise the issue of new matter, even when the specification is silent because the broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals per se. The limited situations in which such an amendment could raise issues of new matter occur, for example, when the specification does not support a non-transitory embodiment because a signal per se is the only viable embodiment such that the amended claim is impermissibly broadened beyond the supporting disclosure. See, e.g., *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473 (Fed. Cir. 1998).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -(c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claims 1-2, 4-13, 16-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Eriksson et al. (US PAT 7,103,020 B2).

Regarding claims 1, 18 and 19, Eriksson discloses "transmitting a transport format combination set reconfiguration message (Col. 6, Lines 67, which recites configuring the transmit version of the transport format combination configures the transport channels at 12 to receive data bits at 201 and produce therefrom a radio block at 200) to a terminal over a certain basic physical subchannel (Col. 6. Lines 66 which recite layer one transport channels at 12 also communicate radio blocks bidirectional with a radio block interleaver/de-interleaver 25 at a radio block port 200. The radio block interleaver/de-interleaver 25 is in turn coupled for bidirectional communication with physical radio channels (e.g., GERAN physical subchannel), said transport format combination set reconfiguration message indicating one transport format combination (Col. 8. Lines 50, which recite the signaling that During transmissions, layer two provides the TFCI to layer one in order to specify which transport format combination is desired for the current radio block of the current call. A TX/RX signal 28, indicative of whether transmission or reception operations are occurring, controls a selector 22 so that the TFCI is provided to the storage device 14 directly from layer two during transmission operations.)

with a certain transport format combination identifier exclusively for signaling use” (Col. 5 Lines 38 which recites first and second configuration information that an information source produces for each transport channel first configuration information and second configuration information, wherein the first configuration information is indicative of how the associated transport channel is to be configured if a first modulation type is used for a current radio block, and wherein the second configuration information is indicative of how the associated transport channel is to be configured if a second modulation type is used for the current radio block) wherein both configuration are indicating signaling use;

“If the transport format combination set reconfiguration message indicates a change in the size of transport format combination identifiers, checking a parameter value indicating a change of a basic physical subchannel utilized by the terminal and ordered by a network, and starting to use a new configuration indicated by the transport format combination set reconfiguration message (Col. 5. Lines 56, which recites the condition if accept new (second configuration) or stay with first (existing) that the physical layer includes a description information source that provides description information from which various configurations of the transport channels can be determined. The description information source provides the description information in the physical layer in response to further information which the description information source receives from a higher layer and which is indicative of a service request initiated by a communication network. According to some exemplary embodiments, one of the transport channels is enabled to extract its associated communication information from a radio block while another of the transport channels is maintained disabled) existing or staying with the existing configuration as a result of the checking”. (Col. 5. Lines 59 which recite the

decision process to the extracted communication information, the decision maker decides whether the other transport channel should be enabled, and provides to the physical layer an indication of its decision. The other transport channel can then be enabled if the decision maker provides an enable indication).

Regarding claims 2 and 17, Eriksson discloses “wherein the one transport format combination relates to exactly one active transport channel with a predetermined block size (Col. 9. Lines 4, which recites related TFC during transmission TFCI as received from layer two is passed through selector 23 for input to an associated one of the layer one transport channels 12. TFCI is processed by the associated layer one transport channel for inclusion in the radio block at 200) and cyclic redundancy check size” (Col.11. Lines 66, which recites the size of CRC along with radio block and transport channel that the TFCS descriptor of FIG. 6) all information needed by the transport format assembler 16 to produce the transport format combinations stored at 14. FIG. 7 illustrates in tabular format exemplary types of CRC coding/decoding which can be designated by corresponding CRC field values in the TFCS descriptor).

Regarding claim 4, Eriksson discloses “wherein said parameter is the change of a basic physical subchannel (Col. 7, Lines 2, which recites in Figure 2 illustrates exemplary embodiment that radio block interleaver/de-interleaver 25 is in turn coupled for bidirectional communication with physical radio channels (e.g., GERAN physical subchannel). Of course, a modulator/demodulator is interposed between the radio block interleaver/de-interleaver and the physical channels) utilized by the terminal and ordered by the network. Fig.5 also illustrated TFCS descriptor utilize by MS and related to BTS and order by core network.

Regarding claim 5, Eriksson discloses “wherein said certain identifier is valued zero” (Col. 12, Lines 2, which recite the value, can be zero as FIG. 7 illustrates in tabular format exemplary types of CRC coding/decoding which can be designated by corresponding CRC field values in the TFCS descriptor) and (Col.15, Lines 65 which recites that Soft values are real numbers, indicating both the value (1 or 0) of a received bit, and the likelihood that the bit was correctly received.)

Regarding claims 6, 13 and 21, Eriksson discloses “wherein said wireless system (Col.1, Lines 38 which recite the core network 15 include circuit switched or packet switched GSM, and circuit switched or packet switched UMTS. The radio access network 11 can be, for example, the GSM/EDGE radio access network (GERAN)) utilizes a GSM/EDGE radio access network”.

Regarding claim 7, Eriksson discloses “wherein the one transport format combination with the certain transport format combination identifier indicated by the transport format combination set reconfiguration message (Col. 8, Lines 38 which recites each TFCI is independent to each other that assembler 16 can assign transport format combination indicators (TFCIs) which **uniquely identify the respective transport format combinations** of the set specified by a given TFCS descriptor.)is independent of the other transport format combinations indicated by the message”.

Regarding claim 8, Eriksson discloses “wherein the size of transport format combination identifiers is fixed” (Col.11, Lines 10 which recite the size of TFCI as shown in FIG. 6, the TFCS descriptor include a field which specifies the size of the radio block).

Regarding claim 9, Eriksson discloses “wherein the size is fixed to a maximum (Col. 1, Lines 12, which recites the maximum from TF 1 to TF N_m specifies the size of the radio block

(see also 200 in FIG. 2 and 41 in FIG. 4), a field which specifies the number of TFCs available for use during the call,) allowable size”.

Regarding claims 10 and 16, Eriksson discloses “a data transfer unit configured to transmit a transport format combination set reconfiguration message to be delivered to (Col. 1, Lines 23 ,which recites MS, Base station and core network that The mobile station 13 (any type of mobile radio transceiver) communicates with a base transceiver station (BTS) of the radio access network 11 via the radio interface 17) a second device over a certain basic physical subchannel, said transport format combination set reconfiguration message indicating one transport format combination with a certain transport format combination identifier exclusively for signaling use, the device further comprises: a processor configured to check a parameter value indicating a change of a basic physical subchannel utilized by the second device and ordered by the device(Col. 6, Lines 13 which recites in FIG. 5 illustrates the response of the present invention to an RAB request from a core network.) and (Col 10. Lines 60 which recites second device that The RRC (or RR) layer in GERAN (for example in a BTS of GERAN) can send the TFCS descriptor to the physical layer of GERAN, and can also send the TFCS descriptor to the RRC (or RR) layer of the mobile station. The RRC (or RR) layer of the mobile station can, according to the invention, forward the TFCS descriptor to layer one of the mobile stations. The above-described exemplary handling of an RAB request is illustrated in FIG. 5. The example of FIG. 5 uses the RRC layer. In FIG. 5, layer one of the BTS and layer one of the mobile station are designated as the PHY layer.), if the transport format combination set reconfiguration message indicates a change in the size of transport format combination identifiers, and a processor configured to start to use a new configuration indicated by the

transport format combination set reconfiguration message, or stay with the existing configuration as a result of the checking”.

Regarding claim 11, Eriksson discloses “a base station, a base station controller, a combination of a base station and a base station controller, or a mobile station (Col. 11. Lines 1 which recites overall system illustrated in FIG. 5 use the RRC layer. In FIG. 5, layer one of the BTS and layer one of the mobile station are designated as the PHY layer, and also illustrated in Fig1 & 2 .BTS controller.

Regarding claim 12, Eriksson discloses “wherein said second device is a base station” (Col. 6. Lines 57, which recites FIG. 2 diagrammatically illustrates pertinent portions of exemplary embodiments of a radio transceiver according to the invention, for example a radio transceiver within a mobile station of the type generally shown at 13 in FIG. 1, or a radio transceiver within a base transceiver station (BTS) of the type generally shown in FIG. 1. The transceiver portion illustrated in FIG. 2 resides generally in layer one (the physical, or PHY, layer) of the transceiver.).

Regarding claim 20, Eriksson discloses “a base station (Col.11. Lines 1, which recites the system In FIG. 5, layer one of the BTS and layer one of the mobile station are designated as the PHY layer), a base station controller (Col. 9. Lines 49, which recites over system with controller that layer one transport channel for TFCI, designated L1TC(TFCI) in FIG. 3, also receives a corresponding receive enable signal from the receive controller 24. This receive enable signal is designated EN (TFCI) in FIG. 3), a combination of a base station and a base station controller, or a mobile station”.

Regarding claims 22 and 23, Eriksson discloses “a computer readable medium embodying a computer program comprising code to perform (Col.17. Lines 3, which recites computer software (program) and hardware (CRM or processor) that perform the task that It will be evident to workers in the art that the embodiments of FIGS. 2 16 can be implemented, for example, by suitably modifying software, hardware or a combination of software and hardware, in conventional radio access networks and mobile stations) the method of claim 1”.

Remarks

7. Applicant argues previous does not disclose the feature of if the TFCS reconfiguration message indicates a change in the size of TFCIs, checking a parameter value indicating a change of a basic physical subchannel utilized by the terminal and ordered by the a network. New reference Eriksson et al. discloses in figure 2 and 5 illustrated the association among the mobile station, base station and core network (col. 5. Lines 37 which recite the decision process that according to some exemplary embodiments, one of the transport channels is enabled to extract its associated communication information from a radio block while another of the transport channels is maintained disabled. The one transport channel provides the extracted communication information to a decision maker in a higher layer. In response to the extracted communication information, the decision maker decides whether the other transport channel should be enabled, and provides to the physical layer an indication of its decision. The other transport channel can then be enabled if the decision maker provides an enable indication).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2617

/LESTER KINCAID/
Supervisory Patent Examiner, Art Unit 2617